

TAB 16

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

JERRY RYAN, On Behalf of Himself and All	§	Civil Action No. 3:03-CV-01769-B
Others Similarly Situated,	§	(Consolidated with 3:03-CV-01827-M; 3:03-
	§	CV-01846-M; 3:03-CV-02079-M)
Plaintiff,	§	ECF
	§	
vs.	§	
	§	
FLOWERVE CORPORATION, et al.,	§	
	§	
Defendants.	§	
	§	
_____	§	

THIRD REBUTTAL REPORT OF BJORN I. STEINHOLT, CFA

I. INTRODUCTION

1. On March 16, 2006, I submitted an expert report addressing, among other things, the issues of market efficiency and loss causation relating to Flowserve Corporation (“Flowserve” or the “Company”) securities traded from February 6, 2001 through September 27, 2002 (the “Class Period”). On April 14, 2006, I submitted a rebuttal to a report by defendants’ expert Denise Neumann Martin (“Martin Report”) dated March 17, 2006, demonstrating numerous fatal flaws in her analyses. On May 30, 2006, I submitted a rebuttal report to Martin’s April 14, 2006 report (“Martin 1st Rebuttal”). Now I have been asked to review and discuss Martin’s second rebuttal report dated July 14, 2006 (“Martin 2nd Rebuttal”).

2. Martin does not provide any new relevant analyses in the Martin 2nd Rebuttal, as discussed in greater detail below. Consequently, her new report does not change my opinion that the market in which Flowserve common stock and options traded during the Class Period was impersonal, open, well developed and efficient. Nor does Martin’s new report change my opinion that the allegedly false and misleading statements caused economic damages to investors who purchased Flowserve common stock during the Class Period.

II. MARKET EFFICIENCY

3. In the Martin 2nd Rebuttal, Martin attempts to justify why she ignores most of the traditional factors considered by courts and experts in assessing the issue of market efficiency in favor of her two alternative analyses, which she claims are inconsistent with a finding of market efficiency. (Martin 2nd Rebuttal, page 1) Below I will discuss the relevant evidence in this case, including Martin’s criticisms of my interpretation of this evidence. Then I will specifically discuss the two alternative analyses proposed by Martin and explain why they are flawed for the purpose of assessing market efficiency.

Factor 1:

Evidence Regarding Flowserve's Trading Volume

4. In my initial report, I analyzed the daily and weekly trading volume, both on a share basis and a dollar basis. This analysis demonstrated that there was: a) substantial trading volume in Flowserve's common stock during the Class Period; and b) that the weekly turnover was greater than the benchmark used by some courts to justify a strong presumption of market efficiency.

5. Martin's first criticism of this evidence is that, according to her, trading volume is one factor among several that she simply does not believe offers any "additional insight" on market efficiency. (Martin 2nd Rebuttal, page 2) I strongly disagree with Martin on this point. As the *Cammer* court explained:¹

The reason the existence of an actively traded market, as evidenced by a large weekly volume of stock trades, suggests there is an efficient market is because it implies significant investor interest in the company. Such interest, in turn, implies a likelihood that many investors are executing trades on the basis of newly available or disseminated corporate information.

6. Other academics have explained the importance of analyzing the trading volume when assessing market efficiency as follows:²

The more active the trade in a security, the higher the likelihood that more value-relevant information will be generated about it by analysts, since large volume promises them generous compensation. Moreover, large volume ensures that the information will be quickly and accurately impounded in the security's price.

7. Martin's second criticism is that the benchmark used by other courts to justify a strong presumption of market efficiency is "without academic basis." (Martin 2nd Rebuttal, page 12) Notably, Martin does not provide any alternative benchmarks. Nor does she provide any alternative

¹ *Cammer v. Bloom*, 711 F. Supp. 1264, 1286 (D.N.J. 1989).

² Barber, Griffin and Lev, 1994, "The fraud-on-the-market theory and the indicators of common stock's efficiency," *The Journal of Corporate Law*, 19 (Winter), 285-312.

ways of analyzing Flowserve's trading volume. In fraud-on-the-market cases, economic experts challenging that a security traded in an efficient market will sometimes examine the frequencies of zero volume days (*Krogman*) or frequencies of days with no more than 1,000 to 3,000 shares (*O'Neil*) as evidence of market inefficiency. By comparison, Flowserve's average daily trading volume was almost 350,000 shares, and even the lowest volume days had trading volume in the tens of thousands of shares.

8. Based on the above, it is my opinion that Flowserve's substantial trading volume is relevant evidence supporting my opinion that Flowserve shares traded in an efficient market.

Factor 2:

Evidence Regarding Analyst Coverage of Flowserve

9. In my initial report I provided evidence that at least 11 different equity analysts covered Flowserve common stock during the Class Period, demonstrating that: a) analysts were in fact monitoring the Company and providing their clients with investment research; and also b) that there was enough demand from investors for Flowserve research to economically justify providing such research.

10. Martin appears to concede that the amount of analyst coverage is a relevant factor to consider when assessing market efficiency, which is interesting since she completely ignored this factor in her previous reports. (Martin 2nd Rebuttal, page 2) In any event, Martin first criticizes me for correctly stating that 11 analysts covered Flowserve during the Class Period because, according to her, my Exhibit D (in my original report) from Nelson Information shows that "no more" than 6 analysts followed the stock from the beginning of the Class Period to the end. (Martin 2nd Rebuttal, page 4) This is an incorrect interpretation of the analyst data from Nelson Information. Nelson does not always include all the analysts who follow a stock in their directory of analyst coverage. For example, AMB Ambro covered and issued analyst reports on Flowserve during the Class Period,

despite not being listed in the Nelson directory for either 2001 or 2002. Similarly, Credit Suisse First Boston is not listed by Nelson for 2001, although they issued an analyst report on Flowserve on February 9, 2001 – two days after the beginning of the Class Period. Dresdner started covering Flowserve prior to the beginning of the Class Period, issued reports throughout 2001, and is likewise not listed by Nelson for 2001. Morgan Stanley and Suntrust also issued reports on Flowserve in 2001 although they are not listed by Nelson for 2001. In addition, there were firms such as KDP Investment Advisors, JP Morgan and USB Warburg who followed Flowserve's fixed income securities. Martin's criticism above has no impact on my assessment of market efficiency relating to Flowserve's stock.

11. Second, Martin criticizes me for not providing a benchmark indicating "how many analysts constitute a number large enough to indicate market efficiency." (Martin 2nd Rebuttal, page 4) Despite apparently being a strong believer in benchmarks, Martin does not provide any guidance of what she believes the appropriate benchmark should be. I am not a strong believer in black-and-white benchmarks as I believe all the evidence should be considered in aggregate. In my opinion, the mere presence of analysts from the large brokerage firms covering Flowserve throughout the Class Period is strong evidence supporting market efficiency. The evidence shows that new material information regarding Flowserve was quickly analyzed, and that the research reports that included these analyses were made available to the client investors who traded Flowserve's stock.

12. Third, Martin claims that I have failed to report that several analysts described Flowserve's price decline on July 22, 2002 and September 27, 2002 as an "overreaction," and goes on to conclude that this means that the price declines "could not be explained by the announcements on those dates." (Martin 2nd Rebuttal, page 4) Contrary to Martin's assertion, all the analysts she quotes attributed the price decline to the new information disclosed. They simply disagreed with investors' evaluation of that new information. Furthermore, Martin is also incorrect that I have

ignored these analyst reports. I specifically addressed the reports in my first rebuttal report when I explained that differences of opinions among analysts and investors are not unusual, and that analysts are often more optimistic about the companies they follow than investors. This is sometimes driven by a desire by analysts to please the company's management in order to maintain access, or to help obtain investment banking projects. Different analysts may also have different views amongst themselves about the companies they follow, which is why some analysts may have a "buy" rating at a time other analysts have a "hold" rating. Similarly, different investors often have different views about the companies they invest in, which is why some investors buy shares in a company at a time other investors sell.

13. Fourth, Martin criticizes me for not addressing a deposition transcript from an analyst at the Boston Company who answered "yes" when asked by one of defendants' attorneys whether he believed market inefficiencies existed in Flowserve's stock during the Class Period. (Martin 2nd Rebuttal, page 6) This answer by the equity analyst is not very surprising. Buy-side analysts generally try to beat the market, and they try to do this by exploiting inefficiencies. In my second rebuttal report, I explained that it is not the existence of inefficiencies that are at issue in a fraud-on-the-market case. It is whether sophisticated investors (perhaps Boston Company) are present. If so, sophisticated investors will exploit these inefficiencies by buying undervalued stocks or selling overvalued stocks, thereby eliminating the inefficiencies. In fact, this is the process that causes new material information to quickly become reflected in the stock price.

14. Based on my review of the above evidence, it is my opinion that the analyst coverage during the Class Period provided investors with substantial research regarding the Company, and, thus, supports my opinion that the market for Flowserve's common stock was efficient.

Factors 3 and 6:*Evidence Regarding Market Makers, Arbitrageurs and Presence of Sophisticated Investors*

15. Factors three and six in my initial report are somewhat related, so I will combine them for the purpose of this discussion. First, the issue raised by the *Cammer* court regarding the number of market makers does not apply to New York Stock Exchange (“NYSE”) listed stocks, such as Flowserve, because their trades go through a specialist, not market makers.

16. Second, the short interest in Flowserve’s stock is evidence that shares were available to be sold short, and that short sellers in fact did sell Flowserve’s shares short. Martin criticizes me for not providing a benchmark for what level of short interest supports market efficiency. (Martin 2nd Rebuttal) Martin misses the point. The fact that Flowserve’s shares were available to be shorted opens up a myriad of trading strategies that can be exploited by arbitrageurs, and the short interest in the millions of shares is evidence that such arbitrage likely took place. Consequently, the Company’s short interest supports my opinion that Flowserve traded in an efficient market.

17. Third, *Cammer*’s factor three relates to the presence of sophisticated investors, which makes my analysis of institutional investors (factor six in my initial report) relevant. The *Cammer* court stated:³

Third, it could be alleged the stock had numerous market makers. The existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level.

18. As noted above, *Cammer*’s factor three specifically references the importance of investors who “would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level,” in other words, so-called sophisticated investors. *Id.* Institutional investors are generally considered to be sophisticated investors. My

³ *Cammer*, 711 F. Supp. at 1286.

analysis of institutional ownership of Flowserve's common stock showed that such ownership was substantial, with institutions owning more than 52.5 million Flowserve shares with a market value of about \$1.5 billion as of the end of June 2002. Based on this, I concluded that the substantial number of the Company's shares owned by institutions supported my opinion that Flowserve's common stock traded in an efficient market.

19. Martin's first criticism of the institutional evidence is that, according to her, institutional ownership is one factor among several that she simply does not believe offers any "additional insight" on market efficiency. (Martin 2nd Rebuttal, page 2) I disagree with Martin as I believe it is one of the most important factors to consider. As noted by some academics:⁴

Institutional investors (e.g., mutual funds, money managers, banks) are presumed to be better informed about the securities they hold and better able to interpret new information than individual investors. Accordingly, the larger the number of institutional investors in a stock or the larger the percentage of stock held by institutions, or both, the more efficient it is expected to be.

20. Martin's second criticism is that no benchmark demonstrates "how much Flowserve stock institutions would have to own to support a finding of efficiency." (Martin 2nd Rebuttal, page 12) Of course there is no such benchmark where if the institutional ownership falls one share short, then the market is inefficient, while if institutions own one share more, then the market is efficient. However, in this case, institutions owned, on average, 85 percent of the shares outstanding, and that is a substantial amount. It means that a majority of the principal to principal transactions likely occurred between institutional investors. These institutions would presumably have access to all the current information about Flowserve, most if not all the recent analyst reports, and they would have the ability to analyze the information and trade accordingly. In my opinion, the institutional

⁴ Barber, Griffin and Lev, 1994, "The fraud-on-the-market theory and the indicators of common stock's efficiency," *The Journal of Corporate Law*, 19 (Winter), 285-312.

ownership evidence Martin chose to ignore provides strong support for my opinion that the market for Flowserve's common stock traded in an efficient market.

Factors 4 and 8:

Evidence Regarding Flowserve's Eligibility to File on Form S-3 and the Company's Market Capitalization and Market Value of Public Float

21. Factors four and eight in my initial report are somewhat related, so I will combine them for the purpose of this discussion. In its opinion, the *Cammer* court stated:⁵

Fourth, as discussed, it would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met.

22. The minimum stock requirement relates to shares owned by non-affiliates having a market value of \$75 million, thus it is similar to the market capitalization factor. As stated in my initial report, I found that Flowserve was eligible to file on Form S-3, a fact that Martin does not dispute. Further I found that Flowserve's market capitalization and market value of public float ranged from roughly \$700 million to almost \$2 billion during the Class Period.

23. Martin's first criticism is that an economist I cited on an unrelated issue apparently stated, in a deposition for a case I have never worked on, that the S-3 requirement is less important than other *Cammer* factors. (Martin 2nd Rebuttal, page 12) This is irrelevant. The fact is that Flowserve was eligible to file on Form S-3, satisfying *Cammer*'s factor four. Ultimately, all the evidence should be considered together, which necessarily would include considering the relevance of the specific evidence.

24. Second, Martin criticizes me for not citing any literature to demonstrate the relevance of a large market capitalization and float. (Martin 2nd Rebuttal, page 12) Fine, let me cite a quote I

⁵ *Cammer*, 711 F. Supp. at 1286.

have seen used by one of Martin's colleagues at NERA Economic Consulting ("NERA") to explain this relevance:⁶

The idea behind the small firm effect is that securities issued by smaller corporations do not respond as rapidly or as predictably to the release of information as securities from larger corporation. . . Firms with smaller capitalization generally attract less interest from investors and, the theory says, do not process information rapidly and efficiently.

25. The above factors generally become an issue when the company at issue is small and defendants' experts, generally professing that these factors are very important, use them to imply that the market for a company's securities are inefficient. At a minimum, Flowserve's large market capitalization and float prevents Martin from making such arguments, thus supporting my opinion that Flowserve traded in an efficient market.

Factor 7:

Evidence Regarding Flowserve's Listing on the New York Stock Exchange

26. I will discuss factor seven in my initial report next (leaving factor five for last). I decided to consider where Flowserve was traded, *i.e.*, the New York Stock Exchange, because where a stock is traded is commonly considered by courts, such as the *Cammer* court, when assessing market efficiency. Martin's criticism is that I did not cite any literature explaining why being listed on the New York Stock Exchange would be an indicator of an efficient market. (Martin 2nd Rebuttal, page 12) Martin is in error. I did provide such cites of the literature. In my original report, I quoted Michael C. Jensen, a well known Harvard economist, who stated:⁷

⁶ Robinson R., 1990, "Fraud on the market theory and thinly-traded securities under Rule 10b-5: How does a court decide if a stock market is efficient?" *Wake Forest Law Review*, 25 (2), 223-251.

⁷ Jensen, Michael C., 1978, "Some anomalous evidence regarding market efficiency," *Journal of Financial Economics*, 6 (2/3), 95-101.

I believe there is no other proposition in economics which has more solid empirical evidence supporting it than the Efficient Market Hypothesis. That hypothesis has been tested and, with very few exceptions, found consistent with the data in a wide variety of markets: the New York and American Stock Exchanges, . . . the option market

I also quoted the *Cammer* Court, which stated:⁸

[A]t a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System.

27. In any event, Flowserve was listed on the New York Stock Exchange and that supports my opinion that Flowserve traded in an efficient market.

Factor 5:

Evidence of Price Reaction in Flowserve's Stock to New Material Information

28. Finally, I agree with Martin that price reaction to new material information is an important factor to consider when analyzing market efficiency. Given that Flowserve's common stock: a) was actively traded each day during the Class Period; b) had numerous securities analysts monitoring its prospects and issuing research reports during the entire Class Period; and c) had on average 85 percent of its shares outstanding owned by large institutions, commonly considered sophisticated investors, one would expect that new material information would quickly become reflected in its stock price. Not surprisingly, my analyses of Flowserve's price reaction to new material information demonstrate such a cause and effect relationship. This is important, as noted by the *Cammer* court:⁹

Finally, it would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected

⁸ *Cammer*, 711 F. Supp. at 1292-93.

⁹ *Cammer*, 711 F. Supp. at 1287.

corporate events or financial releases and an immediate response in the stock price. This, after all, is the essence of an efficient market and the foundation for the fraud on the market theory.

29. My initial report includes my event analyses of the new material adverse information disclosed on July 22, 2002 and September 27, 2002. Each of these two disclosures of new material information caused a statistically significant price decline in Flowserve's common stock. In my first rebuttal report, I also analyzed three earnings announcements where the Company disclosed new material negative information and two earnings announcements where the Company disclosed new material positive information. Each of the three negative earnings announcements caused a statistically significant price decline, and each of the two positive earnings announcements caused a statistically significant price increase. This provides strong support for my opinion that Flowserve traded in an efficient market.

30. While Martin does not dispute that the price declines following the disclosures of the new material information I examined were statistically significant, she claims that my approach does not control for how Flowserve's stock price behaved on "non-news" days. (Martin 2nd Rebuttal, page 7) For the record, I used a control period immediately prior to the Class Period. This is consistent with the paper written by Martin's colleagues at NERA that she specifically cites as an authority on the issue of testing for market efficiency. It states:¹⁰

Because stock prices move all the time, one must compare the movements in response to news stories with a control group of prices. One way to do this would be to look at a sample of days in a class period exclusive of those days alleged to be corrective disclosure(s) and perform a news search. ***An alternative would be to look at a sample just before the class period.***
(Emphasis added)

¹⁰ Ferrillo, Dunbar and Tabak, 2004, "The 'less than' efficient capital markets hypothesis: Requiring more proof from plaintiffs in fraud-on-the-market cases," *St. John's Law Review*, 78 (Winter), 81-129.

31. Martin's criticism of the control period I used is, of course, a red herring. What she really proposes is that I adopt an alternative approach. Specifically, instead of testing Flowserve's price reaction to new, material information (which is the true test of market efficiency), Martin proposes an alternative analysis to test for price reaction to any media account simply mentioning Flowserve (although Martin apparently removed news such as obituaries, sports and calendars?). (Martin 2nd Rebuttal, pages 7-8) First, I am unaware of any academic research that has tested Martin's methodology in the manner suggested by her for the purpose of assessing market efficiency, let alone in a peer-reviewed article. Specifically, it would be helpful to have some research showing where the p-values for various types of different companies, using her methodology, generally fall and how many NYSE listed firms would pass her five percent confidence level threshold (t-stat of 1.96). In any event, Martin's construct is flawed because she performs no analysis to determine whether the so-called "news" contained any new information. Martin also fails to perform any analysis to determine whether the information disclosed was material. In an efficient market, for information to have an impact on the price of a security, the information has to be both new and material. The concept of "non-news" days is also an interesting one since, for a company such as Flowserve, every day will contain some new information regarding the Company. Of course, if Martin actually had evidence that Flowserve's stock did not respond to any particular disclosure of new, material information at any point during the Class Period, she could just identify these instances so that her findings could be evaluated. The absence of such evidence speaks volumes.

32. As discussed above, my event analyses show that Flowserve's stock price reacted quickly to new, material information. This provides strong support for my opinion that Flowserve's stock traded in an efficient market.

Martin Analysis 1:
Earnings Announcements

33. As discussed above, my analysis of each of Flowserve's earnings announcements during the Class Period concluded that positive material information caused statistically significant price increases and negative material information caused statistically significant price declines. This is evidence of an efficient market. Martin does not dispute that each of the respective price movements following the new material information, in fact, were statistically significant. After all, she calculated similar results. (Martin 2nd Rebuttal, page 7) However, Martin provides an alternative analysis of the earnings announcements which she claims is inconsistent with my finding that the market was efficient. (Martin 2nd Rebuttal, page 1) Specifically, she concludes that there was no statistically significant relationship between the amount of earnings surprises and Flowserve's resulting abnormal return during the Class Period. (Martin 2nd Rebuttal, Exhibit 1) Yet even her analysis shows a positive relationship between the earnings surprises and resulting abnormal returns (*i.e.*, that such a positive relationship is more likely than not), albeit not a statistically significant one, as defined by Martin.

34. A key problem with Martin's analysis is that she only focuses on a portion of the information disclosed at the time of the earnings announcements. In other words, she does not control for new material information also disclosed in conjunction with the earnings announcements apart from the earnings surprises themselves. In an efficient market, the price will incorporate all new material information, not just a portion of it. Consequently, by limiting her analysis of the news disclosed at each earnings announcement date to only the earnings surprise, it would have been remarkable if her analysis had shown a statistically significant relationship at the five percent confidence level given all the other information also disclosed contemporaneously. To illustrate the problem with Martin's analysis, one can analyze the events individually, as I did in my rebuttal

report. Such an analysis of the individual events provides much better insight whether the market for Flowserve's stock reacted to new material information.

35. Martin only considers the Company's earnings surprises (or lack thereof) when analyzing Flowserve's price movements. One of the points Martin specifically makes in her reports is that her analysis shows significant price reactions on dates when no earnings surprise was announced. (Martin Report, part V. A.) Martin takes this as evidence against market efficiency without analyzing the earnings announcements further. Of course, actually analyzing all of the material new information disclosed at the time of the earnings announcements is necessary to evaluate whether Flowserve's price reaction is consistent with that of an efficient market. Below is a discussion of the two occurrences of statistically significant price movements on days when in-line earnings were announced during the Class Period, on April 24, 2001 and on July 24, 2001.

36. On April 24, 2001, despite the fact that Flowserve only reported earnings in-line with expectations, several analysts raised their ratings/estimates as a result of positive new information about integration/cost savings. Following the disclosure, Flowserve's stock price increased, an increase that was statistically significant. In part because Martin's analysis only considers the in-line earnings, and completely ignores the positive news regarding integration/cost savings which explains the price increase, she erroneously concludes that evidence exists that is inconsistent with Flowserve trading in an efficient market.

37. Similarly, on July 24, 2001, despite the fact that Flowserve only reported earnings in-line with expectations, analysts were disappointed as the Company also lowered its earnings guidance substantially. Following the disclosure, Flowserve's stock price decreased, a decrease that was statistically significant. Martin's analysis only considers the in-line earnings, and completely ignores the negative news regarding lowered guidance which explains the price decrease. She thus

erroneously concludes that evidence exists that is inconsistent with Flowserve trading in an efficient market.

38. In summary, my discussion of each of the events she uses for her analysis included in my first rebuttal report demonstrates that the market reacted efficiently to new material information. Martin's faulty analysis and erroneous conclusion is simply a product of a poorly constructed statistical test which fails to control for vital information, and thus is incapable of providing meaningful insight whether Flowserve's stock traded in an efficient market. That all of Flowserve's price movements cannot all be explained simply by analyzing the earnings surprise data is not evidence of market inefficiency when, at the same time, the price movements are fully explainable when considering all the new, material information that was disclosed on those dates. After all, an efficient market reflects all the publicly available information, not just a small subset of it.

Martin Analysis 2:
Systematic Price Overreaction

39. Martin also claims that her analysis of price overreactions is inconsistent with my conclusion that Flowserve traded in an efficient market. (Martin 2nd Rebuttal, page 1) As I explained in my rebuttal report, if one looks for a pattern one can generally find such pattern, even in a random set of numbers. Martin implies that she did not specifically look for a pattern. (Martin 2nd Rebuttal, page 10) However, she does not explain why the time period she examined for this analysis is different than the time period she examined for her earnings analysis (where she initially went all the way back to 1997). Coincidentally, Martin's choice of time period happened to strengthen her argument in both cases. As I demonstrated in my rebuttal report, had she used the longer time period, her "systematic" price overreaction would disappear.

40. Martin critiques a paper by Eugene Fama supporting market efficiency even in light of apparent over and under reactions. She provides her own quote from the Cornell and Ruten

paper stating that market efficiency remains a hotly-debated question in the finance profession. (Martin 2nd Rebuttal, page 10) She might as well have quoted my report when I, in the same paragraph she criticizes, stated that academics are divided on the issue of market efficiency. But the issue of stocks at all times reflecting their true fundamental value is different than the issue of assessing market efficiency for class certification, which simply relates to investor reliance that the prices reflect the publicly available information. As the Cornell and Rutten paper she quotes goes on to conclude: ¹¹

There is almost no dispute, however, that for securities traded in open and developed markets as measured by the *Cammer* and *Krogman* criteria, it is reasonable for all but the most sophisticated investors to rely on the market prices. There is thus little dispute that with respect to such securities, reliance on the integrity of the market prices (and thus on the defendants' statements) is appropriately presumed.

41. Martin also takes several issues with a NERA study I referenced in my second rebuttal report, none of them relevant.¹² (Martin 2nd rebuttal, pages 10-11) The purpose of referencing the NERA article was to show: a) that the length of time it takes for new, material information to become fully incorporated into the stock price depends on the nature of the

¹¹ Cornell and Rutten, "Market efficiency, crashes and securities litigation," Draft Working Paper, (December 2005).

¹² Martin states that the NERA study did not seek to measure specifically how much time it would take for information to be fully incorporated into a stock price, asserting that this would have "required use of intraday trading data." The NERA study did attempt to determine the time it took the market to fully incorporate new information: "The principal focus of this paper will be on the third choice: how to determine the proper length of the event window. We focus on the case where the event itself occurs at a known time, so that the start of the event window is generally not an issue. What is unknown is when the market fully incorporates that news into the stock price." Martin also claims that I incorrectly included two groups in my summary of announcements that were "unusual in nature." However, that is how NERA defined the groups, versus a third group of announcements that were usual in nature. Finally, she claims that the data is misleading because, "the minimum reaction time for a significant event would be a full day, even if the reaction were (sic!) instantaneous." If the minimum "reaction time" was indeed one day, why did NERA report that the average reaction time for the 159 announcements that were not "unusual in nature," was less than one day (it was 0.321 days)?

information disclosed, and could extend beyond one day; and b) that this is not inconsistent with an efficient market. As the NERA article itself concluded:¹³

Under the efficient market hypothesis, it is not necessary for a stock to fully incorporate all information immediately, but only for it to provide the best estimate of the value of that information, given the current state of computing ability, at any point in time.

42. Martin agrees that a price reaction, even in an efficient market, may indeed take more than one day. Yet she argues that the direction of such a price movement after the first day “should not be predictable.” (Martin 2nd Rebuttal, page 11) But the “systematic” price overreactions Martin identifies could not have been predicted by investors at the time because the data she analyzes was not available to investors during the Class Period. Specifically, investors in 2001 did not know about the rebound in Flowserve’s price on July 24, 2002 and September 30, 2002, the two largest rebounds in her sample and key drivers of her result. The last rebound occurred after the Class Period and was not known by any investor during the Class Period. On the other hand, in 2001, investors did have access to information about 2000. The problem is, as demonstrated by my simple illustrative analysis in my second rebuttal report, Martin’s trading strategy did not work in 2000, nor did it work in 1999 for that matter. Similarly, in 2002, it could not have been predicted that Martin’s trading strategy would work and not result in losses as it did in 1999 and 2000. The data is simply not there to make such a prediction, except in hindsight.

III. MATERIALITY, CONFIRMATORY STATEMENTS AND LOSS CAUSATION

43. In the paragraphs below I will discuss some fundamental differences between Martin’s view of materiality, confirmatory statements and loss causation versus my own. Unlike

¹³ Krivin, Patton, Rose and Tabak, 2003, “Determination of the appropriate event window length in individual stock event studies,” NERA Working Paper, page 20.

Martin, I will focus on the economic evidence, explain the differences between Martin's analyses and my own and defer to this Court to provide the necessary legal conclusion.

Materiality

44. As stated in my original report, I rely on the U.S. Supreme Court's guidance as to the definition of materiality: information a reasonable investor would have wanted to consider prior to making an investment decision. Martin, on the other hand, calls this definition "non-authoritative," and offered her definition requiring a statistically significant price change to be observed in response to the disclosure. (Martin 1st Rebuttal, page 6)

45. To understand the impact of the two different definitions of materiality, I will analyze the first misrepresentation, the Company's announcement of Flowserve's 4Q00 results. As I wrote in my first rebuttal report, on February 6, 2001, Flowserve's reported earnings per share that missed analysts' consensus forecast by two cents, resulting in a statistically significant price decline of almost eight percent. According to the Complaint, while the reported earnings were below analysts' expectations, the earnings were still overstated by \$2.4 million, or about six cents per share. (Complaint, paragraph 132) Martin concludes that Flowserve's overstatement of 4Q00 earnings by six cents is not material because the overstatement did not result in a statistically-significant price increase. I believe that this conclusion is illogical. Logic would dictate that, if a two cents per share shortfall in earnings caused the price of Flowserve to decline eight percent, then an eight cents per share (two cents plus six cents) shortfall would cause an even greater decline in Flowserve's stock price.

46. Martin's criticism of my logic is that I do not present any analysis "evaluating the magnitude of the price reaction." (Martin 2nd Rebuttal, page 13) However, my opinion is consistent with the basic financial theory that if earnings and earnings growth are reduced in a DCF valuation

model, the value will decline.¹⁴ It is not necessary at this stage to quantify the magnitude of the decline. To do such a quantification, one has to consider many factors. For example, following the filing of the Complaint, on February 13, 2006, Flowserve restated their financials again. The earnings restatement for the entire FY2000 reported on February 6, 2001 is now \$13.2 million, or roughly 20 cents per share. Sufficient to say, had Flowserve reported its true earnings for 4Q00 or FY 2000 on February 6, 2001, its stock price would have declined substantially more than it did.

47. In my first rebuttal report, I also analyzed the Company's price movement following its 3Q01 earnings announcement. On October 22, 2001, Flowserve reported earnings per share that beat analysts' expectations by three cents, resulting in a statistically significant price increase of more than 6.5 percent. Plaintiffs, however, allege that these earnings were overstated by more than \$2.9 million, or seven cents per share, meanings that the Company would have missed analysts' earnings expectations, not beaten them. (Complaint, paragraph 132) This, in turn, would logically have led to a price decline, not a price increase. Even under Martin's definition of materiality, requiring a price increase, this was a material misstatement and is evidence of an increase in inflation.

48. Based on the above, I concluded that the alleged misrepresentations were material and inflated Flowserve's stock price during the Class Period.

Confirmatory Statements

49. Martin also refers to several other alleged misrepresentations during the Class Period where she did not find any statistically significant price increases, and claims that this is evidence that the stock price was not inflated. (Martin 2nd Rebuttal, page 13) First, I do not need to consider

¹⁴ See, for example, Brealey and Myers, "Chapter 4: The Value of Common Stocks," *Principles of Corporate Finance*, McGraw-Hill 2003.

these other statements because I have demonstrated price inflation based on the two events discussed above. Second, below I will discuss Martin's implication that a statement that is not followed by a statistically significant price increase cannot be inflationary, and provide a proper context to evaluate false statements.

50. In an efficient market, only new, material information will cause a change in the stock price. After new, material information has been incorporated into the price of a stock, simply repeating the information will have no further impact on the stock price. In other words, the stock price will be the same whether or not the information is repeated. This is not necessarily so for confirmatory statements. Take, for example, a company that in January provides the guidance that it expects to earn \$1 per share for the calendar year. If a media report in June states that this company in January provided earnings guidance of \$1 per share for the full year, the media report is simply repeating information that is known to the market. Whether or not the media report becomes part of the public mix of information does not impact the stock price. However, if an analyst in June asks the same company whether it still expects to earn \$1 for the full year, and the company confirms its prior guidance, then this is new, material information. In other words, it is information that investors would want to know, which is why it is asked so often by analysts and investors alike. The stock price may still not increase in any statistically significant manner because the new information may not change investors' expectation. Even so, whether or not the company confirms its earnings guidance does have an impact on the stock price. Confirming the guidance effectively maintains the stock price at the level it traded, while refraining from confirming the guidance would generally be a cause for concerns amongst investors resulting in a decline in the stock price. In other words, the

price of the stock would be different if such a confirmatory statement had been made rather than if the confirmatory statement had not been made.¹⁵

51. The above examples also imply that confirming statements that are false can impact the stock price by maintaining inflation. The critical issue is, if the false confirming statement had not been made, would the stock still have traded as it did, or would it have declined? Publicly traded companies are in constant communications with investors and analysts who frequently ask them to confirm previous statements and guidance. The reason investors and analysts ask companies to make confirmatory statements is to make sure nothing has changed since the statements were originally made. If a company chooses not to respond to such inquiries, this is generally viewed negatively, and would likely cause the stock price to decline. Consequently, in order to maintain artificial inflation in a stock, the original false statements often have to be confirmed.

Loss Causation

52. I have previously explained how historical earnings, earnings guidance, debt covenants and merger integration are tied together. Martin responds that simply asserting a relationship doesn't make it true. (Martin 2nd Rebuttal) Actually, I explained the relationship, I did not simply assert it. Flowserve's alleged integration problems were concealed by the false financials and relate, in part, to why the Company's financials were inflated, and the need for the Company to eventually reduce guidance. The false financials also provided the foundation on which the

¹⁵ In the above example of a company that provides earnings guidance of \$1 for the year, one could also examine what happens if the company eventually announces that they have met the earnings guidance, *i.e.*, the company actually reports earnings of \$1 per year. In this example, one would not expect much change in the stock price as investors' expectations likely would closely mirror the company's guidance. This does not mean that the earnings announcement was not new information, nor that it was not material – it was just not materially different from investors' expectations. Had the company failed to report earnings within the appropriate deadline, or reported earnings below the guidance, the stock price would have declined.

Company's guidance would be built, which, combined with the guidance, also set investors' expectations for the Company's future performance. Furthermore, the historical false financials were used to mislead investors regarding the Company's supposed compliance with debt covenants.

53. Martin does not specifically address the inter-relationship between the four categories of fraud she has come up with other than to suggest that the existence of such an inter-relationship is a new theory. (Martin 2nd Rebuttal, page 13) However, the relationship between historical earnings and future earnings (including earnings guidance), for example, is a well known reality. Estimates of future earnings are, in part, based on an analysis of the historical earnings and earnings growth. As explained by Nobel Laureate William F. Sharpe and Dr. Gordon J. Alexander: "Since security analysis typically involves forecasting earnings per share, it is useful to examine the historical record to see how earnings per share have changed over time."¹⁶

54. Martin also responds that not a single investor has been identified who believed Flowserve's debt covenants had been violated, just investors who were "concerned that Flowserve might violate debt covenants in the future." (Martin 2nd Rebuttal, page 14) This is an interesting argument. She effectively claims that: because a) plaintiffs believe they can prove a stronger case (that Flowserve actually did violate the debt covenants as opposed to just being close to violating the debt covenants increasing the likelihood of such a violation in the future), then b) there is no relationship between the disclosure and the alleged fraud relating to the debt covenants. This ties in to Martin's view of loss causation, that there needs to be a specific corrective disclosure explaining fraudulent activity itself, not simply a disclosure that reveals the truth previously concealed by the

¹⁶ William F. Sharpe and Gordon J. Alexander, *Investments* (Englewood Cliffs, N.J.: Prentice Hall, 1990) p. 508, 515.

fraudulent activity. Below is a discussion illustrating the implications of Martin's loss causation argument.

55. Loss causation is an area where Martin and I fundamentally disagree. As best as I can determine, it is Martin's opinion that a fraud, which conceals the true financial condition of a company, is not revealed with a subsequent revelation of the true financial condition of the company. Rather, according to Martin's logic, it also necessarily has to reveal how the true financial condition was concealed by the fraud in earlier periods. I disagree with this view of loss causation. For example, take a company that consistently earns 50 cents per share, but reports earnings of \$1 per share. If the company's stock trades at 20 times earnings, this would imply a stock price of \$20 per share (P/E ratio of 20 times \$1). Now, let's assume that the company, unable to continue to over-report its earnings indefinitely, finally starts to report its true earnings of 50 cents per share. This would now imply that its stock price would decline to \$10 per share (P/E ratio of 20 times 50 cents). If an investor paid \$20 per share for the stock when the company falsely reported \$1 per share in earnings, and suffered a \$10 per share loss when the stock declined following the company finally reporting its true earnings, in my opinion the investor's losses were caused by the alleged fraud. Martin, on the other hand, as best as I can understand, would argue that the \$10 per share loss from the decline in the stock price was unrelated to the alleged fraud because there was no disclosure that the company's previously reported financials were false. In my opinion, Martin's definition of loss causation would effectively render the current securities laws obsolete as company insiders could make a series of false statements inflating the company's stock price, sell shares to the unsuspecting public investors at inflated prices and then simply reduce guidance eliminating the inflation without disclosing that any of the prior inflationary statements were false.

56. In the case of Flowserve, the Company reduced its guidance on July 23, 2002 and September 27, 2002. The resulting price declines were \$8.69 per share and \$5.40 per share,

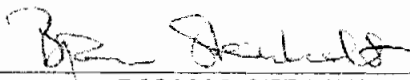
respectively. This amounts to a price decline of more than 60 percent from Flowserve's July 22, 2002 closing price, translating into a decline in market value of its common stock of more than \$775 million. Both Martin and I agree that these declines were statistically significant and not explained by market or industry factors. I am unaware of any Company specific factors unrelated to the alleged fraud that could explain these price declines. In my opinion, the vast majority of these two price declines relate to the disclosure of Flowserve's true financial condition previously concealed by the alleged fraud. Consequently, it is my opinion that the alleged fraud caused substantial economic harm to Class members.

III. CONCLUSION

57. Based on the above, the issues raised in the Martin 2nd Rebuttal do not change my opinions that: a) Flowserve's common stock traded in an efficient market; and b) the allegedly false and misleading statements inflated Flowserve's common stock and caused economic damages to investors who purchased Flowserve common stock during the Class Period.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed this 28th day of July, 2006, at San Diego, California.

Respectfully submitted,



BJORN I. STEINHOLT, CFA